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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DAILEY, THOMAS J	
ART UNIT	PAPER NUMBER
2452	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/659,774	HAVERINEN ET AL.	
	Examiner	Art Unit	
	Thomas J. Dailey	2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,7,10,13-15,20,21 and 24-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,7,10,13-15,20,21 and 24-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/12/2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims1, 4, 7, 10, 13-15, 20-21, and 24-29 are pending.

Response to Arguments

2. Applicant's arguments filed 10/1/2009 have been fully considered but they are not persuasive.

3. The applicant argues with respect to claim 1 that the combination of O'Neill and Bhagwat fail to disclose all the limitations of the claim. Specifically, the applicant contends O'Neill fails to disclose transmitting to a terminal a reauthentication identity to a terminal. The applicant reaches this conclusion because they assert O'Neill only discloses that the mobile node may send an identity to the network, since message 550 is directed towards the Remote Home Agent 112 of the MN 202 in the home domain 1102, but it is first sent to the access router 128 as message 550a and it is then sent to the remote home agent 112 as message 550b, citing O'Neill paragraph [0053]. The applicant continues, the message 550 includes a network access identifier having a user part and a realm part, however the message 550 is sent towards the Remote Home Agent 112, and therefore is not transmitted to the terminal, as recited in claim 1.

4. The examiner disagrees. O'Neill discloses transmitting to the terminal a reauthentication identity including a unique realm name uniquely identifying an authentication server ([0053], lines 9-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; it is essential that the realm name is transmitted to the mobile device). The citations taken by the examiner illustrate the end node (terminal) sending a reauthentication identity, and as the node is a mobile terminal, it essential that the identity was transmitted to the node at some point, as it contains information regarding the networks to which it connects. That is, O'Neill discloses transmission of a reauthentication identity to a terminal in a broad sense, but the Bhagwat reference was relied upon to disclose transmission in response to a specific request as elaborated on below.

5. The applicant further argues with respect to claim 1 that Bhagwat fails to disclose transmitting to the terminal a reauthentication identity uniquely identifying an authentication server in response to the request fro full authentication. Specifically, the applicant contends Bhagwat only discloses a cookie, but the cookie does not uniquely identify an authentication server or back end server in Bhagwat.

6. The examiner disagrees. Bhagwat discloses transmitting a reauthentication identity to a terminal in response to an authentication request (column 13, lines 18-24, a mobile host (terminal) authenticates with a PPP Back end server, and once authenticated receives a cookie (a reauthentication identity) which allows for fast re-authentication; fast authentication further disclosed in column 13, lines 52-59). That is, from the cookie sent by a mobile host and originally received after sending an authentication request, a specific back end server is identified.

Further still, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Specifically, the O'Neill teaching was relied upon for disclosing a reauthentication identity including a unique realm name uniquely identifying an authentication server ([0053], lines 9-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; it is essential that the realm name is transmitted to the mobile device). Therefore, it was never the examiner's explicit contention that Bhagwat disclosed a reauthentication identity that uniquely identified an authentication server.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 4, 7, 10, 13-15, 20-21, and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill (US Pub. No. 2003/0176188) in view of Bhagwat et al (US Pat. 6,651,105), hereafter "Bhagwat."

9. As to claim 1, O'Neill discloses a method, comprising:

receiving a request for full authentication of a terminal ([0031], lines 1-8, every mobile device (terminal or end node) will have a home AAA server (see Fig. 1), at this home AAA server will be stored service profiles that inherently require full authentication of that particular mobile device);

transmitting to the terminal a reauthentication identity including a unique realm name uniquely identifying an authentication server ([0053], lines 13-17, the NAI (reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; it is essential that the realm name is transmitted to the mobile device);

receiving a request for reauthentication from the terminal, the request for reauthentication including the reauthentication identity including the unique realm name uniquely identifying the authentication server ([0053], lines 13-23, any end node (terminal) sending an authentication request identifying its home authentication server (via a "reauthentication identity") reads upon "a request for reauthentication" as the end node was previously authorized by it's home authentication server, as that server stores it's service profile);

wherein the request for reauthentication is routed to the authentication server according to the unique ream name included in the request for reauthentication ([0053], lines 16-23).

But, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication identity and is full authenticated, but is silent in regards to the order in which those steps occur.

However, Bhagwat discloses transmitting a reauthentication identity to a terminal in response to an authentication request (column 13, lines 18-24, a mobile host (terminal) authenticates with a PPP Back end server, and once

authenticated receives a cookie (a reauthentication identity) which allows for fast re-authentication; fast authentication further disclosed in column 13, lines 52-59).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Bhagwat because the substitution of one known element (i.e. Bhagwat's method of providing a reauthentication identity) for another would have yielded predictable results (fast reauthentication for mobile devices, i.e. the end result of both Bhagwat and O'Neill) to one of ordinary skill in the art.

As to claims 4, 7, 13, 15, and 20, they are rejected by the same rationale set forth in claim 1's rejection.

10. As to claim 10, O'Neill discloses a system comprising:

a first authentication server configured to receive a request for full authentication of a terminal ([0031], lines 1-8, every mobile device (terminal or end node) will have a home AAA server (first authentication server) (see Fig. 1), at this home AAA server will be stored service profiles that inherently require full authentication of that particular mobile device), and configured to transmit to the terminal a reauthentication identity including a unique realm name uniquely identifying the first authentication server ([0053], lines 13-17, the NAI

(reauthentication identity) of any end node (terminal) includes a realm name and identifies the home authentication server; that realm name inherently is transmitted to the mobile device); and

a second authentication server configured to receive a request for reauthentication from the terminal, the request for reauthentication including the reauthentication identity including the unique realm name identifying the first authentication service ([0053], lines 13-23, any end node (terminal) sending an authentication request identifying its home authentication server (via a "reauthentication identity") to a visited AAA server (second authentication server) reads upon "a request for reauthentication" as the end node was previously authorized by it's home authentication server, as that server stores it's service profile), and configured to route the request for reauthentication to the first authentication server according to the unique realm name identifying the first authentication server ([0053], lines 16-23).

But, O'Neill may not explicitly disclose the transmission to the terminal of the reauthentication identity is in response to the request for the full authentication of terminal. Rather, O'Neill simply discloses the terminal has a reauthentication identity and is full authenticated, but is silent in regards to the order in which those steps occur.

However, Bhagwat discloses transmitting a reauthentication identity to a terminal in response to an authentication request (column 13, lines 18-24, a mobile host (terminal) authenticates with a PPP Back end server, and once authenticated receives a cookie (a reauthentication identity) which allows for fast re-authentication; fast authentication further disclosed in column 13, lines 52-59).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Bhagwat because the substitution of one known element (i.e. Bhagwat's method of providing a reauthentication identity) for another would have yielded predictable results (fast reauthentication for mobile devices, i.e. the end result of both Bhagwat and O'Neill) to one of ordinary skill in the art.

11. As to claims 27 and 29, O'Neill discloses a method for use by a terminal, they are rejected by the same rationale set forth in claim 10's rejection

12. As to claim 24, O'Neill discloses wherein the authentication network element is an authentication server (Fig. 5, label 114).

13. As to claim 25, O'Neill discloses wherein the authentication network element is a proxy server (Fig. 5, label 135).

14. As to claim 26, O'Neill discloses wherein the authentication network element is a service access point for authentication by an authentication server (Fig. 5, label 128).

15. Claims 14 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Neill in view of Bhagwat as applied to claims 13 and 20 above, and in view of Barriga-Caceres et al (US Pub No. 2003/0163733), hereafter "Barriga."

16. As to claims 14 and 21, O'Neill and Bhagwat do not explicitly disclose wherein the means for transmitting to an authentication network element a request for reauthentication using the reauthentication identity including the unique realm name includes the reauthentication identity in an identity response packet according to an Extensible Authentication Protocol.

However, Barriga discloses an authentication system (Abstract) that utilizes an Extensible Authentication Protocol ([0101]).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of O'Neill and Bhagwat with

Barriga in order to utilize a well-known protocol in the art that would allow O'Neill's system to be compatible with other, already deployed, systems.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

18. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on 571-272-6967. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

21. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2452

/THU NGUYEN/
Supervisory Patent Examiner, Art Unit 2452